



## **EARTH SCIENCE SYLLABUS**

**ESC 1000**

**Earth Science Lecture**

**Spring 2010**

**Instructor's Name:** Marianne O'Neal Caldwell

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**Instructor's Office:** DSCS 128 (Science Building, Room 128)

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**Office Hours (Day, Time, Location):**

Mondays at Dale Mabry Campus in DSCS 128, 7:45-8am; 9:15am-11am; 12:15pm-1pm

Tuesdays online 7:30am-10am

Wednesdays at Dale Mabry Campus, DSCS 128; 7:30am-8am; 9:15am-11am

Thursdays online 10am-12:30pm

Also available by appointment

**Class Schedule:** Mondays and Wednesdays 8-9:15am

**Course Description:**

Earth Science is designed to acquaint the student with the principles and theories in the earth sciences. The subdisciplines of geology, meteorology, and astronomy will be emphasized. The course will be taught by a combination of lectures, visual aids, and videotapes.

**Course Objectives:**

Describe the scientific method.

Define what a mineral is and discuss the importance of minerals in geology.

Discuss the origin and classification of rocks and explain the rock cycle.

Identify and explain the processes acting at the earth's surface that create and shape landforms.

Summarize the causes and effects of earthquakes and diagram the earth's interior structure.

Describe and discuss intrusive and extrusive igneous processes and features.

Discuss the theory of plate tectonics.

Describe the significance of geologic time, state the age of the earth, and explain relative and chronological dating methods.

Discuss global concepts such as locating positions on the earth; e.g. latitude and longitude, the earth's orbit around the sun, and seasonal variations.

Discuss the composition and circulation of earth's oceans and the geology of the seafloor.

Describe the composition, structure and circulation of the earth's atmosphere.

Describe and discuss the various weather elements such as temperature, atmospheric pressure, relative humidity, wind, clouds, and precipitation.

List and describe the components of our solar system and discuss its origin.

Describe the universe beyond our solar system and discuss current ideas about its age and origin.

### **Text Book:**

#### **Required :**

EARTH SCIENCE, by Tarbuck and Lutgens, 12th ed.  
Earth Science Study Guide by M. Caldwell

### **Grading System:**

Final grades will be computed by:

A	100-90%
B	89-80%
C	79-70%
D	69-60%
F	less than 60%

### **Academic Dishonesty Policy:**

Use of outside resources during tests is not permitted and all writing assignments must be written in your own words. Any type of cheating on the tests or papers will result in a grade of F. Plagiarism is the unauthorized use of someone else's work. Any student found guilty of plagiarism will be subject to the college's policy on plagiarism.

### **Attendance Policy:**

Students are expected to attend each class meeting and attendance will be recorded. Please arrive prior to the start time of each class. During the class students are asked to refrain from using cell phones for calls or text messages.

### **Instructional Methods:**

The grades of the course will be based on 5 test grades weighted at 18% each. Five tests will be given along with an optional cumulative final test. The grade on the cumulative exam may be used to replace your lowest test grade. If you miss a test, then you must take the final to replace the grade. The tests will be composed of multiple

choice, fill-in-the-blank, short answer, or some combination of these question types. You will need a scantron for each test.

The remaining 10% of the grade will be based on in-class worksheets/writing assignments throughout the term. These assignments will be weighted at one point each and must be completed during class time (8-9:15am). If you miss a class time in which a worksheet/assignment was given, you receive a zero for that assignment. No late assignments will be accepted.

### **Request for Accommodations:**

If, to participate in this course, you require an accommodation due to a physical or learning impairment, you must contact the Office of Services to Students with Disabilities. The office is located in the Student Services Building, Room 208. You may also reach the office by telephone at (813) 253-7031 {voice line}.253-7035 (TDD).

### **Assignments:**

The Gordon Rule Requirement for this class will be fulfilled by summaries of the review questions for the class. The review questions can be found at the end of the chapter outlines. There will be five sets of review questions (one for each test). The summaries will be due the class period one week before each of the tests. Please make a copy for yourself before turning in the paper. The answers should be written in the student's own writing style and should answer at least twenty review questions. The reports should be typed and contain correct grammar and sentence structure. If the reports are turned by the respective due dates, up to 3 additional points may be added to your test as extra credit (maximum of 15 points for the class). Those papers with incorrect grammar and not containing sentences will not be awarded extra credit. Note that only the typed summaries turned in on time will be counted for extra credit. Late reports or those not typed are not eligible for extra credit. Even if you choose to not earn extra credit at least one set of review questions must be submitted prior to the final class in order to fulfill the Gordon Rule requirement. The review questions are due at the beginning of class each of the respective due dates. No review questions will be accepted via email. You may also upload the questions onto the classroom website instead of printing a paper copy. Directions for accessing the website are listed below. The link to upload the paper is "Assignments" located on the left side of the home page.

### **Online Classroom:**

A classroom website is available for student use at: [online@hccfl.edu](mailto:online@hccfl.edu) . Powerpoint notes from the lectures are posted. The classroom gradebook with be kept on the website so that students can access grades at any time. You may also use the classroom email for communications and upload Gordon Rule assignments. Students are asked to login within the first two weeks. In order to login please follow these directions:

- 1) Go to the HCC website at: <http://www.hccfl.edu>
- 2) Click on the link at the upper right area of the website that says: online@hcc  
The direct link is: <http://www.hccfl.edu/distance-learning/dl-splash.aspx>

3) Click on the uppermost link in the shaded box. The direct link is:  
<http://hcconline.blackboard.com>

4) Follow the directions for login; you must know your student ID number; if you have problems, please contact the help line number listed on the login page.

### **Tentative Class Schedule M/W:**

Jan	11	Introduction
	13	Chapter 1
	18	Holiday
	20	Chapters 1 & 2
	25	Chapter 2
	27	Chapters 2 & 3
Feb.	1	Chapters 3 & 5; Test I Review Due
	3	Chapter 5
	8	TEST I; Chapters 1, 2, 3, 5
	10	Chapter 7
	15	Holiday
	17	Chapter 8
	22	Chapters 8 & 9
	24	Chapter 9; Test II Review Due
Mar.	1	Chapter 10
	3	TEST II; Chapters 7, 8, 9, 10
	8	Chapter 13
	10	Chapters 13 & 14; Test III Review Due
	15	Chapter 15
	17	TEST III; Chapters 13, 14, 15
	22	Chapter 16
	24	Chapter 17
	29	Mid-term Break
	31	Mid-term Break
Apr.	5	Chapter 18; Test IV Review Due
	7	Chapter 19
	12	TEST IV: Chapters 16,17,18,19
	14	Chapter 21
	19	Chapter 21 & 22
	21	Chapter 22; Test V Review Due
	26	Chapter 23
	28	TEST V; Chapters 21, 22, 23
May	3	Review
	10	OPTIONAL CUMULATIVE FINAL EXAM 8am